

Notice of Allowability

Application No.

09/966,568

Examiner

Paul S. Hyun

Applicant(s)

HAND ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicants' Amendment filed 6 September 2005.
2. ☒ The allowed claim(s) is/are 1, 5, 7, 8, 14, 19-25, 30-33.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 09/27/2001
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Response to Arguments

With respect to objection to the Drawings, Applicants' amendments filed on September 6, 2005 have been fully considered. The objection to the Drawings has been withdrawn.

With respect to objection to the Specification, Applicants' amendments filed on September 6, 2005 have been fully considered. The objection to the Specification has been withdrawn.

With respect to objection to claims 1, 2, 12, 15, 17, 24 and 27 regarding the inconsistent spellings of the words "downflow/ down flow", "upflow/up flow", and "sidewalls/side walls", Applicants' amendments filed on September 6, 2005 have been fully considered. The objection to the claims has been withdrawn.

With respect to objection to claim 7 regarding the insufficient antecedent for the limitations "said bag" and "said cap", Applicants' amendments filed on September 6, 2005 have been fully considered. The objection to the claim has been withdrawn.

With respect to objection to claims 10, 11, 18, 28 and 30 regarding the use of trademarked terms, Applicants' amendments filed on September 6, 2005 have been fully considered. The objection to the claims has been withdrawn.

With respect to rejection of the claims in the instant application, the First Office Action dated June 7, 2005 indicated that claims 3-5, 7, 10-13, and 18-30 would be allowable if rewritten to overcome the U.S.C. 112 2nd paragraph rejections and to include all the limitations of the base claim and any intervening claims. The Examiner's Amendment was made to overcome the U.S.C. 112 2nd paragraph rejections and to include all the limitations of the base claim and any intervening claims in the allowable claims.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joy Alwan on October 20, 2005.

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CLAIMS

1. (Amended) An apparatus for the extraction of organic compound comprising:
a pressure vessel having a top, a bottom, and side creating a pressurized chamber;
an incoming sample line with an inline filter [attaching] attached to the top of the pressure vessel [with] by means of a first quick connect fitting;
a sampling container inserted in the pressure vessel, wherein said sampling container is a bag with a second quick fitting [having a wide mouth opening] in fluid communication with said first quick connect fitting to allow organic compounds to flow from the sampling container through the top of the pressure vessel, [a second quick connect fitting], the sampling container further comprising a wide mouth opening with a cap on the end opposite the second quick fitting, and eyelet openings to attach the sampling container to a rack insertible in the pressure vessel; and, a gas line attached to the side of the pressure vessel by a third quick connect fitting to pressurize the pressure vessel.

Claims 2-4 have been cancelled.

5. An apparatus for the extraction of organic compounds as recited in claim 1 wherein said filter comprises:
a glass screen positioned between a first and second stainless steel mesh, creating a sandwich arrangement;

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first and second polytetrafluoroethylene blocks encasing said sandwich arrangement, and each of said first and second blocks having centered bore holes allowing fluid flow through said first and second blocks.

Claim 6 has been cancelled.

7. An apparatus for the extraction of organic compounds as recited in claim 1 wherein the sampling container is comprised of a polyvinylfluoride film and wherein the wide mouth opening has a cap in a threaded connection to the sampling container.

8. (Amended) The apparatus as recited in claim 1 wherein said [container] pressure vessel is constructed of stainless steel.

Claims 9-13 have been cancelled.

14. (Amended) A method of zero headspace extracting of organic compounds comprising the steps of:

(a) sampling said organic compound and placing said organic compound in a sampling container;

(b) pressurizing said sampling container inside a pressure vessel having a top₁ [and] a bottom and sidewalls; the top having an opening with a first quick connect fitting having an upflow and downflow side affixed₁ [with] the sidewalls having an opening with

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a second quick connect fitting having an upflow and downflow side affixed, [and wherein] said top [is] being removably attached to said sidewalls creating a pressurized chamber in said pressure vessel; [and said] the sampling container having a third quick connect fitting connected to the upflow side of said first quick connect fitting of said pressure vessel; pressurizing said sample container being accomplished by connecting a pressure line to said second quick connect fitting and introducing a pressure fluid to said pressurized chamber;

(c) rotating said pressure vessel and sampling container;

(d) pressurizing said sampling container [by connecting a pressure line to a second quick connect fitting and introducing a pressure fluid to the chamber;] and

(e) filtering said organic compound into a second sampling container, wherein the filter comprises a glass screen positioned between a first and second stainless steel mesh creating a sandwich arrangement, a first and second polytetrafluoroethylene block encasing the [the] sandwich arrangement, each block having a centered bore hole allowing fluid flow through the first and second block.

Claims 15-18 have been cancelled.

19. The method as recited in claim 14 wherein said step of pressurizing further comprises pressurizing said pressurized chamber until said organic compound is visible at said first quick connect fitting.

20. (Amended) The method as recited in claim 14 wherein said step of rotating said pressure vessel and sampling container further comprises placing said pressure vessel in a rotator and pressure being extracted for [a] 18 hours.

21. The method as recited in claim 14 wherein said step of pressurizing said sampling container further comprises reintroducing a pressurizing fluid into said pressurized chamber.

22. (Amended) The method as recited in claim [14] 21 wherein said step of filtering said organic compound into a second sampling container further comprises attaching a second sampling container to said filter at a fifth quick connect fitting whereby when said pressurized fluid is reintroduced into said pressurized chamber said organic compound flows through said filter into said second sampling container.

23. The method as recited in claim 14 wherein said sampling container is polyvinylfluoride film bag having said third quick connect fitting on one end of the bag and a wide mouth opening with a threaded cap on the other end of the bag.

24. (Amended) [The method as recited claim 14 wherein said pressure vessel is a stainless steel canister having an opening at the bottom with a piston inserted and in contact with said sampling container.] A method of zero headspace extracting of organic compounds comprising the steps of:

(a) sampling said organic compound and placing said organic compound in a sampling container;

(b) pressurizing said sampling container inside a pressure vessel, wherein the pressure vessel is a stainless steel canister having a top, a bottom and sidewalls; the top having an opening with a first quick connect fitting having an upflow and downflow side affixed, said top being removably attached to said sidewalls creating a pressurized chamber in said pressure vessel, the bottom having an opening with a piston inserted and in contact with said sampling container;

(c) rotating said pressure vessel and sampling container;

(d) pressurizing said sampling container; and

(e) filtering said organic compound into a second sampling container, wherein the filter comprises a glass screen positioned between a first and second stainless steel mesh creating a sandwich arrangement, a first and second polytetrafluoroethylene block encasing the sandwich arrangement, each block having a centered bore hole allowing fluid flow through the first and second block.

25. (Amended) The method as recited in claim [14] 24 wherein said step of pressurizing said sampling container inside a pressure vessel further comprises tying a cord or string around said sampling container and operating said piston to compress said sampling container in a uniform manner until said organic compound is visible at said first quick connect fitting.

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Claims 26-29 have been cancelled.

30. The method as recited in claim 14 wherein said sampling container is a polytetrafluoroethylene bottle.

31. (New) An apparatus for the extraction of organic compound comprising: a pressure vessel having a top, a bottom, and side creating a pressurized chamber; an incoming sample line with an inline filter attached to the top of the pressure vessel by means of a first quick connect fitting; a sampling container inserted in the pressure vessel, wherein the sampling container is a bottle having a wide mouth opening and a lid, the lid having a fifth quick connect fitting in communication with said first quick connect fitting to allow organic compounds to flow from said bottle through said top.

32. (New) The apparatus as recited in claim 31 wherein said pressure vessel has an opening at the bottom with a piston inserted allowing manual operation of said piston from outside said pressure vessel.

33. (New) The apparatus as recited in claim 31 wherein said sampling container is a polytetrafluoroethylene bottle.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

Ray et al. (US 5,607,234) disclose a universal zero-headspace extractor vessel and rotator. The reference discloses most of the limitations recited in amended claims 1 and new claim 31. However, the reference does not teach or suggest a sampling container in the form of a bag or a bottle that is placed inside the extractor vessel and in fluid communication with the vessel.

The Ray et al. reference also does not disclose a filter as recited in amended claims 14 and 24. Ray et al. disclose a filter 28 disposed at the top of the extraction vessel wherein the filter comprises glass fiber sandwiched between upper and lower screens (see lines 27-35, col. 4). However, the reference does not disclose that the filter is encased in two polytetrafluoroethylene blocks.

Forsman et al. (US 6,820,780 B2) discloses a hydration system in the form of a bag that comprises reservoir 12, a wide mouth opening in the form of neck 42, cap 52, and a quick connect fitting in the form of hose 22 located opposite neck 42 (see FIG 1). However, Forsman et al. does not disclose a pressure vessel to be used in conjunction with the disclosed hydration system. Moreover, it would not have been obvious to one of ordinary skill in the art to use this hydration system as a sampling bag to be used in conjunction with an extractor.

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Staunton (US 3,138,299 A) discloses a squeeze bottle pipette. The bottle 10 is made of polytetrafluoroethylene (see line 54, col. 2), and further comprises wide mouth 12 and lid 16 (see FIG 1). However, Staunton does not disclose a pressure vessel to be used in conjunction with the disclosed squeeze bottle. Moreover, it would not have been obvious to one of ordinary skill in the art to utilize the bottle disclosed by Staunton as a sampling container to be used in conjunction with an extractor.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Calvin Calmon; et al. (US 3,223,619)

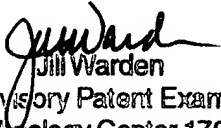
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul S. Hyun whose telephone number is (571)-272-8559. The examiner can normally be reached on Monday-Friday 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PSH 10/24/05


Jill Warden
Supervisory Patent Examiner
Technology Center 1700